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# High Water

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## FLOODPLAIN MANAGEMENT SECTION

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Montana counties can now regulate development in special flood hazard areas that may receive sheet flooding (shallow flooding one foot deep or less). Such areas have been named as "Zone B" areas by the Federal Emergency Management Agency (FEMA). State and federal minimum standards do not require any regulation of development within these zones, but counties are now empowered to do so by House Bill 630, passed by the 1983 Montana Legislature. The bill was initiated upon petition by Lewis and Clark County.

### MAPS THAT YOUR COMMUNITY NEEDS

Several times since we began publishing "High Water," we have mentioned two maps that every community entered in the National Floodplain Insurance Program (NFIP) should have to achieve effective floodplain management. The Flood Hazard Boundary Map (FHBM) is based on the best available data and identifies the general flood hazard within a community. It is used in the Emergency phase of the NFIP for floodplain management and insurance purposes.

A flood Insurance Rate Map (FIRM) is issued following the Flood Insurance Study and shows the flood boundaries, elevations, and insurance risk zones identified by the detailed engineering study. After the effective date of the FIRM, the community's floodplain ordinance must be in compliance with Regular phase requirements based on identified flood hazards. In Regular phase communities, lenders use the Flood Insurance Rate Map to determine the flood insurance requirements; insurance agents use the map to determine flood insurance premium rates for specific properties. These premium rates, based on the risk zone designations, are applied to new and substantially improved structures.

### HOW ARE FLOOD HAZARD ZONES DETERMINED?

Certain areas within the 100-year flood boundary are termed special flood hazard areas. Those areas between the 100-year and 500-year flood boundaries are termed areas of moderate flood hazards. The remaining areas are above the 500-year flood level and are termed areas of minimal flood hazard. FEMA has determined, however, that a much larger incidence of flood damage occurs in areas designated as having "moderate" and "minimal" flood risks than those terms imply.

These flood hazard areas are subdivided into flood hazard zones (insurance risk rate zones) according to the following criteria:

**Zone A:** Special flood hazard areas inundated by the 100-year flood, determined by approximate methods; no base flood elevations are shown or flood hazard factors determined.

**Zone AO:** Special flood hazard areas inundated by 100-year shallow flooding where depths are between 1.0 and 3.0 feet; depths are shown, but no flood hazard factors are determined.

**Zone AH:** Special flood hazard areas inundated by 100-year shallow flooding where depths are between 1.0 and 3.0 feet; base flood elevations are designated, but no flood hazard factors are determined.

**Zone A1-30:** Special flood hazard areas inundated by the 100-year flood, determined by detailed methods; base flood elevations are shown and zones subdivided according to flood hazard factors.

**Zone A99:** Special flood hazard areas inundated by the 100-year flood; these areas will be affected by a flood protection system that is well on the way to completion; no base flood elevations are shown or flood hazard factors determined.

**Zone B:** Areas of moderate flood hazard.

**Zone C:** Areas of minimal flood hazard.

**Zone D:** Areas of undetermined but possible flood hazard.

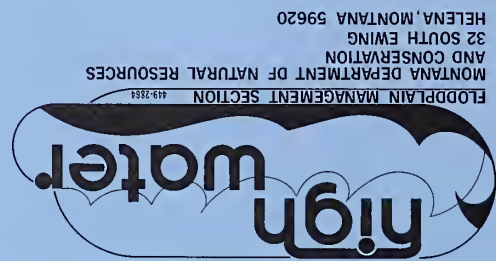
Insurance rates and floodplain management measures will vary depending on the zone.

### MONTANA FLOODS

Since 1950, flood damages in Montana have amounted to hundreds of millions of dollars. Major floods occurred in 1952 and 1953 in the Milk and Missouri river basins, 1964 in northwestern Montana, 1975 in the western part of the state, 1978 in southeastern Montana, and in 1981 in west-central Montana.







June 1983

Volume 11.

The most costly flood was probably that which occurred in June 1964 along both sides of the northern Continental Divide. Streams were high from late snow-melt runoff, and soils were already saturated when significant amounts of precipitation fell. The principal streams affected by the floods were the St. Mary, Belly, and Waterton rivers in the Hudson Bay basin; the Dearborn, Sun, Teton, and Marias rivers in the Missouri River basin; and the Flathead River upstream from Flathead Lake in the Columbia River basin. Peak discharges on some streams ranged up to several times that of the probable 100-year flood.

Total flood damages were estimated to be about \$55 million for the 1964 flood. Almost half of the damage occurred on the Flathead drainage basin near Kalispell. In addition to the monetary costs, thirty lives were lost, 350 people were injured, and about 8,700 people were evacuated from their homes during the high-water period.

The floods of 1981 that affected at least ten counties in western Montana prompted three counties—Broadwater, Jefferson, and Meagher—to enroll in the National Flood Insurance Program (NFIP).

Participation in the NFIP is prerequisite to receiving federal disaster aid. In future disasters FEMA will take a firmer stance. Before it grants disaster relief money, the agency will take a closer look at whether counties are enforcing floodplain management measures, and whether they are participating in the program at the time of the flood.

## LEGAL ASPECTS OF FLOODPLAIN MANAGEMENT

Courts of law in the United States have, without exception, supported the goals and concepts of floodplain regulations. They have strongly endorsed the major objectives of floodplain management.

The courts have held that prevention of private land uses that may produce nuisances is not a "taking of the land." Floodplain management regulations do not take property from its owners. They do, however, protect all owners from "nuisance" hazards. No landowner has a right to create a public nuisance. Regulations may control those uses of private land that threaten public safety or cause damage to adjacent lands. Reasonable uses such as agriculture and other open-space uses may continue.

Public use of private land—for a transportation corridor, for instance—is considered taking of the land. The natural conveyance of flood flows and flood storage are not public uses, because the state did not place the property in the path of floods. Nature did.

The identification of a property as being in a floodplain does not affect the property values, as some contend. The property would have been flood prone regardless of the mapping. An artificially high value may have been placed on the property before its identification as being flood prone. In all reality, the property is unsuitable for certain development purposes.

## LET THE BUYER BEWARE

At one time, the law seemed to favor the seller rather than the buyer. Now, however, many states have statutes that require subdividers to discover and divulge information concerning flood hazards. Both the National Flood Insurance Program and the Montana Floodplain and Floodway Management Act contain disclosure provisions requiring sellers to inform buyers of the flood-prone status of property. In addition, federal banking regulations require that banks must disclose flood hazards to mortgagees of properties.

Newcomers to an area can protect themselves by doing some scouting of their own when looking for land. In low-lying areas, look for grass and other debris hanging from fences, high water marks on sheds and buildings along waterways, silt deposits, and uprooted trees or shrubs. Clouds of mosquitos may indicate nearby pools from earlier flooding. Talk to old-timers in the area about previous flooding. Look in news files at the local newspaper office.

## MOBILE HOME PARKS IN FLOOD HAZARD AREAS

Much has been said in past issues of "High Water" about placement of mobile homes in floodplains. Enforcing the tie-down requirements for mobile homes can be a difficult task. There are ways that it could be made easier, however. Floodplain managers can inventory existing mobile home subdivisions within flood hazard areas and write to the owners advising them of the tie-down requirements, and of the regulations affecting expansion of such subdivisions. The Department of Health and Environmental Sciences is currently strengthening its regulations affecting the location and expansion of mobile home subdivisions in floodplains. In addition, the NFIP now requires that mobile homes be anchored before they are eligible for insurance coverage.

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